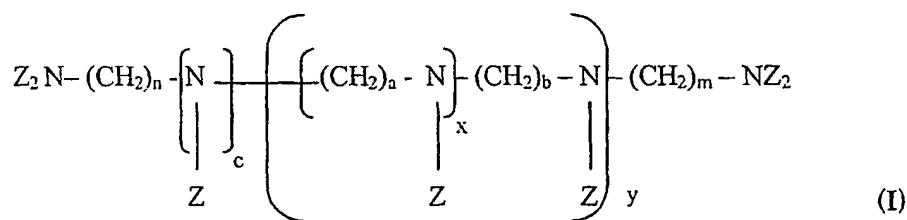


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## CLAIMS

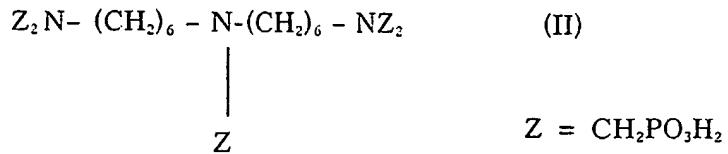
1. A compound for use as, or in connection with, a white rust corrosion inhibitor for water-treatment, said compound consisting of an  
5 organophosphonate having the general formula (I):



Wherein

 $\text{Z} = -\text{CHR}_1\text{PO}_3\text{R}_2$  $\text{R} = \text{H}, \text{CH}_3, \text{C}_2\text{H}_5$  or  $\text{M}$ 10  $\text{R}^1 = \text{H}, \text{CH}_3, \text{CR}_3, \text{C}_6\text{H}_5$ , or  $\text{SO}_3\text{H}_2$  $\text{M} = \text{alkali metal or ammonium ion}$  $n = 0$  to 10 $m = 0$  to 10 $a = 0$  to 1015  $b = 0$  to 10 $c = 0$  or 1 $x = 0$  to 10 $y = 0$  to 10

20 2. A compound as claimed in Claim 1, in which  $\text{R}$  and  $\text{R}^1$  each =  $\text{H}$ ,  $n = 6$ ,  $m = 6$ ,  $c = 1$ ,  $y = 0$  whereby the compound is bis(hexamethylene)triamine-pentakis (methylene phosphonic acid), as in formula (II):



3. A compound for use as a white rust corrosion inhibitor for water-treatment, said compound being a random copolymer of vinylidene diphosphonic acid and vinyl sulphonic acid in a molar ratio of 5 between 1:1 and 1:500.

4. A compound as claimed in Claim 3, in which the molar ratio is 1:100 molar.

10 5. A compound as claimed in Claim 3 or Claim 4, in which the molar ratio is 1:20 molar.

6. A composition for use as, or in connection with a corrosion inhibitor for water-treatment, said composition comprising a 15 phosphonated oligomer according to Claim 1 or a random copolymer of vinylidene diphosphonic acid and vinyl sulphonic acid, according to Claim 2, together with additives conventionally used in the water treatment industry.

20 7. A composition as claimed in Claim 6 in which the additives are selected from the group consisting of phosphonocarboxylic acids or salts and dispersants.

8. A composition as claimed in Claim 6 or Claim 7 in which the 25 dispersant is a polyacrylate.

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9. A composition as claimed in any one of Claims 6 to 8 in which the composition comprises a biocide.

10. A composition as claimed in any one of Claims 6 to 9 in which the phosphonocarboxylic acid or salt is a phosphonated oligomer of maleic acid, of general formula (III):

$$\text{H}[\text{CHCO}_2\text{MCHCO}_2\text{M}]_n \text{PO}_3\text{M}_2 \quad (\text{III})$$

10 wherein M is a cation such that the oligomer is soluble in water, and n is greater than 1.

11. A composition as claimed in any one of Claims 6 to 9, in which the polyacrylate compound is a low molecular weight polymer having a molecular weight between 2000 to 5000.

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12. A method for inhibiting corrosion in, or in connection with, a water-using system, said method consisting of the application or addition to said system of an effective amount of a phosphonated oligomer according to Claim 1 or a random copolymer of vinylidene diphosphonic acid and vinyl sulphonic acid according to Claim 2 or of a composition according to Claim 3.

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13. A method as claimed in Claim 12 in which the method consists of the application to a metal prior to contact with water of an effective amount of a phosphonated oligomer according to Claim 1 or a random copolymer of vinylidene diphosphonic acid and vinyl sulphonic acid according to Claim 2 or of a composition according to Claim 3.

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14. A method as claimed in Claim 12 or 13, in which the oligomer or copolymer is used in an effective amount of up to 1000 ppm.

15. A method as claimed in Claims 12 to Claim 14, in which the  
5 oligomer or copolymer is used in an effective amount of up to 250 ppm.

16. A method as claimed in any one of Claims 12 to 15 in which the oligomer or copolymer is used in an effective amount of up to 100 ppm.

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